WHAT IS CLAIMED IS:

1. A cleaning unit comprising:

a cleaning blade that cleans a surface of a photosensitive drum, wherein

when a sine-wave vibration of 10 Hz is applied to the cleaning blade, a peak temperature of a loss tangent tanδ is in a range of 2°C to -30°C.

2. The cleaning unit according to claim 1, wherein when the sine-wave vibration of 10 Hz is applied to the cleaning blade, a temperature-dependent change of the loss tangent tanδ in a temperature range of 10°C to 40°C is in a range of 0.001/°C to 0.020/°C.

3. The cleaning unit according to claim 1, wherein the cleaning blade is made of thermosetting urethane elastomer.

4. The cleaning unit according to claim 3, wherein static friction coefficient of the surface of the photosensitive drum is in a range of 0.1 to 0.4.

5. The cleaning unit according to claim 4, wherein the photosensitive drum includes a surface layer that contains a fluorine-contained resin particle.

6. A process cartridge comprising:

an arrangement that includes at least a cleaning unit that cleans residual toner on a photosensitive drum, and that is detachably mounted on an image forming apparatus, wherein

the cleaning unit includes a cleaning blade that is in contact with a surface of the photosensitive drum to clean the surface, and

when a sine-wave vibration of 10 Hz is applied to the cleaning blade, a peak temperature of a loss tangent tanδ is in a range of 2°C to -30°C.

7. The process cartridge according to claim 6, wherein when the sine-wave vibration of 10 Hz is applied to the cleaning blade, a temperature-dependent change of the loss tangent tanδ in a temperature range of 10°C to 40°C is in a range of 0.001/°C to 0.020/°C.

8. The process cartridge according to claim 6, wherein the cleaning blade is made of thermosetting urethane elastomer.

9. The process cartridge according to claim 8, wherein the coefficient of static friction of the surface of the photosensitive drum is in a range of 0.1 to 0.4.

10. The process cartridge according to claim 9, the photosensitive drum includes a surface layer that contains a fluorine-contained resin particle.

11. An image forming apparatus comprising:

a photosensitive drum on which an electrostatic latent image is formed;

a charging unit that charges the photosensitive drum;

an exposing unit that exposes a surface of the photosensitive drum to form the electrostatic latent image;

a developing unit that supplies toner to the surface of the photosensitive drum to form a toner image;

a transferring unit that includes either of a transferring member and an intermediate transfer element to transfer the toner image to a recording medium; and

a cleaning unit that includes a cleaning blade that cleans the surface of the photosensitive drum, wherein

when a sine-wave vibration of 10 Hz is applied to the cleaning blade, a peak temperature of a loss tangent tanδ is in a range of 2°C to -30°C.

12. The image forming apparatus according to claim 11, wherein when the sine-wave vibration of 10 Hz is applied to the cleaning blade, a temperature-dependent change of the loss tangent tanδ in a temperature range of 10°C to 40°C is in a range of 0.001/°C to

0.020/°C.

13. The image forming apparatus according to claim 11, wherein the cleaning blade is made of thermosetting urethane elastomer.

14. The image forming apparatus according to claim 13, wherein static friction coefficient of the surface of the photosensitive drum is in a range of 0.1 to 0.4.

15. The image forming apparatus according to claim 14, wherein the photosensitive drum includes a surface layer that contains a fluorine-contained resin particle.

16. The image forming apparatus according to claim 11, wherein

the toner is made by melting and kneading a mixture of at least a binder resin, a colorant, and a mold releasing agent, then pulverizing and classifying the mixture, and

a volume average particle size of the toner is in a range of 3 micrometers to 8 micrometers.

17. The image forming apparatus according to claim 16, wherein

the binder resin is a prepolymer of a polyester having a functional group that contains a nitrogen atom,

the toner is made by dispersing the mixture in an aqueous medium in presence of fine particles of resin, then allowing to undergo

polyaddition reaction followed by drying and classifying the dispersed mixture, and

a volume average particle size of the toner is in a range of 3 micrometers to 8 micrometers.

18. The image forming apparatus according to claim 11, wherein a ratio of the volume average particle size and a number average particle size of the toner Dv/Dn is in a range of 1.05 to 1.80.

19. The image forming apparatus according to claim 11, wherein

a shape factor SF-1 of the toner is in a range of 100 to 180, and

a shape factor SF-2 of the toner is in a range of 100 to 190.

20. The image forming apparatus according to claim 11, wherein a fluorine-contained resin is added externally as an additive to the toner.

21. The image forming apparatus according to claim 11, further comprising:

an applying unit that applies fluorine-contained resin on the photosensitive drum.

22. The image forming apparatus according to claim 11, wherein the cleaning unit includes at least two cleaning blades.

23. A cleaning unit comprising:

a cleaning blade that cleans a surface of a photosensitive drum, wherein

an impact resilience of the cleaning blade at 10°C is equal to or more than 35 percent, and

a rate of change of the impact resilience in a temperature range of 10°C to 40°C is equal to or less than 1.4/°C.

24. The cleaning unit according to claim 23, wherein the cleaning blade is made of a urethane elastomer.

25. The cleaning unit according to claim 23, further comprising a downstream cleaning blade that is disposed at a downstream of rotation of the photosensitive drum than the cleaning blade.

26. The cleaning unit according to claim 25, wherein

the cleaning blade is disposed in a counter form, and

the downstream cleaning blade is disposed in a trailer form.

27. The cleaning unit according to claim 25, wherein each of the cleaning blade and the downstream cleaning blade is supported by an independent supporting element.

28. A process cartridge comprising:

an arrangement that includes at least a cleaning unit that cleans

residual toner on a photosensitive drum, and that is detachably mounted on an image forming apparatus, wherein

the cleaning unit includes a cleaning blade that is in contact with a surface of the photosensitive drum to clean the surface,

an impact resilience of the cleaning blade at 10°C is equal to or more than 35 percent, and

a rate of change of the impact resilience in a temperature range of 10°C to 40°C is equal to or less than 1.4/°C.

29. The process cartridge according to claim 28, wherein the cleaning blade is made of a urethane elastomer.

30. The process cartridge according to claim 28, further comprising a downstream cleaning blade that is disposed at a downstream of rotation of the photosensitive drum than the cleaning blade.

31. The process cartridge according to claim 30, wherein

the cleaning blade is disposed in a counter form, and

the downstream cleaning blade is disposed in a trailer form.

32. The cleaning unit according to claim 30, wherein each of the cleaning blade and the downstream cleaning blade is supported by an independent supporting element.

33. An image forming apparatus comprising:

a photosensitive drum on which an electrostatic latent image is formed;

a charging unit that charges the photosensitive drum;

an exposing unit that exposes a surface of the photosensitive drum to form the electrostatic latent image;

a developing unit that supplies toner to the surface of the photosensitive drum to form a toner image;

a transferring unit that has either a transferring member or an intermediate transfer element, and transfers the toner image to a surface of a recording medium; and

a cleaning unit that includes a cleaning blade that cleans the surface of the photosensitive drum, wherein

an impact resilience of the cleaning blade at 10°C is equal to or more than 35 percent, and

a rate of change of the impact resilience in a temperature range of 10°C to 40°C is equal to or less than 1.4/°C.

34. The image forming apparatus according to claim 35, wherein the cleaning blade is made of a urethane elastomer.

35. The image forming apparatus according to claim 33, further comprising a downstream cleaning blade that is disposed at a downstream of rotation of the photosensitive drum than the cleaning blade.

36. The image forming apparatus according to claim 35, wherein the cleaning blade is disposed in a counter form, and the downstream cleaning blade is disposed in a trailer form.

37. The image forming apparatus according to claim 35, wherein each of the cleaning blade and the downstream cleaning blade is supported by an independent supporting element.

38. The image forming apparatus according to claim 35, further comprising a decharging unit that decharges the surface of the photosensitive drum after transferring the toner image, wherein

the downstream cleaning blade is disposed at the downstream of rotation of the photosensitive drum with respect to the cleaning blade with the decharging unit disposed between the cleaning blade and the downstream cleaning blade.

39. The image forming apparatus according to claim 38, wherein the second cleaning blade is disposed at an upper stream side of rotation of the photosensitive drum than the charging unit.

40. The image forming apparatus according to claim 33, wherein

a volume average particle size of the toner is in a range of 3 micrometers to 8 micrometers, and

a ratio of the volume average particle size and a number average particle size of the toner Dv/Dn is in a range of 1.00 to 1.4.

41. The image forming apparatus according to claim 33, wherein

a shape factor SF-1 of the toner is in a range of 100 to 180, and

a shape factor SF-2 of the toner is in a range of 100 to 180.

42. The image forming apparatus according to claim 33, wherein the toner is made by allowing a toner solution to undergo at least either of a cross linking reaction and an extension reaction in an aqueous medium, wherein the toner solution is made by dispersing a mixture of at least a prepolymer of a polyester having a functional group that includes a nitrogen atom, a mold releasing agent, a colorant, and a polyester, in an organic solvent.

43. A toner that is used for developing in electrophotography, wherein

a volume average particle size of the toner is in a range of 3 micrometers to 8 micrometers, and

a ratio of the volume average particle size and a number average particle size Dv/Dn is in a range of 1.00 to 1.40.

44. The toner according to claim 43, made by allowing a toner solution to undergo at least either of a cross linking reaction and an extension reaction in an aqueous medium, wherein the toner solution is made by dispersing a mixture of at least a prepolymer of a polyester having a functional group that includes a nitrogen atom, a mold

releasing agent, a colorant, and a polyester, in an organic solvent.

45. A toner that is used for developing in electrophotography, wherein

a shape factor SF-1 is in a range of 100 to 180, and

a shape factor SF-2 is in a range of 100 to 180.

46. The toner according to claim 45, made by allowing a toner solution to undergo at least either of a cross linking reaction and an extension reaction in an aqueous medium, wherein the toner solution is made by dispersing a mixture of at least a prepolymer of a polyester having a functional group that includes a nitrogen atom, a mold releasing agent, a colorant, and a polyester, in an organic solvent.